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Committee on Energy and Commerce

Good morning, my name is Navin Nayak and I'm an Environmental Advocate with the U.S. Public Interest Research Group, or U.S. PIRG. U.S. PIRG is the national office for the State PIRGs, which are environmental, good government and consumer advocacy groups active around the country. The State PIRGs have more than 300,000 members across the country. I appreciate the opportunity to speak before the Committee and to present our views on the energy bill before Congress. We hope and expect that our views, and the views of other citizen groups, will be reflected in the final bill.

The state PIRGs have a long history of working for a clean affordable and safe energy future. Our goal is to reduce America's dependence on fossil fuels and nuclear power by increasing our production of clean renewable energy and the efficiency of our energy system.

We agree, as I'm sure all Members of Congress do, with the President's desire for a "reliable supply of affordable, environmentally responsible energy." The primary goals of energy policy should be to make our nation more secure and less dependent on foreign energy, to reduce the energy costs on all consumers—residences, commercial, industrial—and to minimize the harmful public health and environmental impacts of energy production and consumption. I believe that we are all united in wanting to achieve these goals.

Unfortunately, the energy bill that the President supports, and Congress tried to pass last year (H.R.6), which is similar to the 2005 Energy Policy Act recently introduced in the House, would fail on all counts. *According to the Department of Energy's analytical agency—the Energy Information Administration (EIA)—under the energy bill the U.S. would increase its imports of foreign oil by 85 percent.*[1] Far from making us more secure or more independent, the energy bill would make us less secure and more dependent on foreign sources of energy than we are today. Furthermore, the EIA concluded that under the energy bill "changes to production, consumption and prices [would be] negligible." In addition to increasing America's dependence on foreign oil, the energy bill would provide no relief to consumers and businesses. From an economic and consumer perspective, the Department of Energy's analysis concludes that the energy bill would be completely ineffectual.

When the Department of Energy's own analysis concludes that the energy bill will not help consumers or reduce our dependence on oil, it is time for Congress to reverse course and move towards an energy policy that will make us genuinely safe and secure.

An Energy Policy That Works

Fortunately, there is no shortage of solutions and policies that can meet the goals of a good energy policy. I would like to highlight just 3 provisions that should be integral to an energy policy that moves America forward—all of which are lacking in the current energy bill.

1) **Reduced Dependence on Oil**

   According to the EIA, the United States consumed 19.61 million barrels of petroleum per day in 2002. This is projected to grow to 28.3 million barrels per day by 2025 if we do not take action. Moreover, the U.S. only possesses 3 percent of all known oil reserves in the world, and the EIA predicts that after peaking in 2008, domestic crude oil production will decrease

[1] http://www.eia.doe.gov/oiaf/servicerpt/pceb/pdf/sroiaf(2004)02.pdf

to 5.93 million barrels per day in 2010. Congress must deal with the country's oil deficit by reducing America's dependence on oil; we cannot ignore this problem and pass an unstable energy future on to our children. Simply calling for increased drilling on public and private lands would do nothing more than delay the inevitable need to reduce our dependence on oil.

The National Commission on Energy Policy, which included representatives from industry, labor and an environmental group, recommended that we set a national goal of reducing our dependence on oil by 3-5 million barrels per day by 2025. This would cut America's oil dependence by nearly 15 percent of projected levels in 2025. The National Academy of Sciences concluded that it is economically feasible to double the efficiency of our vehicles in the next 10 years using existing technology; this would allow cars to get 40 mpg and would reduce America's dependence on oil by 4 million barrels per day by 2020. The energy bill before Congress would move us in the opposite direction, increasing U.S. imports of oil by 85 percent. If Congress is sincere about making this country more secure and safe, it must include a provision that will set a strong enforceable standard for reducing America's dependence on oil.

2) **Renewable Energy Standard**

According to the Energy Information Administration, the U.S. has the technical potential to generate four times our total current electricity use from renewable energy. Currently, only 2 percent of our electricity comes from sources such as wind, solar, geothermal and biomass, and more than 90 percent of the country's electricity comes from polluting and dangerous sources of energy such as nuclear, coal, oil and gas. Investing in renewable energy would avoid the negative public health and environmental impacts associated with burning fossil fuels and generating nuclear power.

Several reports, including an analysis by EIA, have concluded that producing 20 percent of the nation's electricity by 2020 is an affordable and achievable goal. Moreover, numerous economic analyses—including one released by U.S. PIRG today entitled *Redirecting America's Energy: The Economic and Consumer Benefits of Clean Energy Policies*—demonstrate that investing in renewable energy would create hundreds of thousands of new jobs, reduce demand for natural gas saving consumers billions of dollars, and alleviate the public health and environmental impacts of burning fossil fuels. In fact, we found that passing a renewable energy standard and investing in renewable energy and energy efficiency would create twice as many jobs and save consumers more than twice as much on natural gas and electricity than the energy bill.

The best way to increase electricity generation from clean renewable energy is to pass a renewable energy standard (often called a renewable portfolio standard) requiring that a fixed percentage of our electricity come from renewable energy by a certain date. In the absence of federal action, several states across the country have moved forward by passing renewable energy standards. In November, the voters in Colorado supported an initiative to increase Colorado's production of renewable energy to 10 percent by 2015. Seventeen other states have already passed renewable energy standards including Texas, Hawaii, New Mexico, New York. If America is going to reduce its dependence on fossil fuels and nuclear power, and move towards a safe and clean energy future, the energy bill should, at the very least, include

a national renewable energy standard of 10 percent by 2015, similar to the one that has passed the Senate.

3) **Global Warming**

Today, February 16, 2005, will be remembered as the day the rest of the world moved forward to protect their citizens from the threat of global warming. One hundred and thirty seven countries signed the Kyoto Protocol, which comes into effect today. The United States, however, has ignored the international scientific and political consensus that global warming is a serious current and future problem that requires immediate action.

Human activities over the last century – particularly the burning of fossil fuels – have changed the composition of the atmosphere in ways that threaten to dramatically alter the global climate in the years to come. Global warming is caused by the greenhouse effect, a natural phenomenon in which gases in the Earth's atmosphere, including water vapor and carbon dioxide, trap heat from the sun near the planet's surface. Without a natural greenhouse effect, temperatures on Earth would be too cold for life to survive.

Over the last century, however, the chemical makeup of the Earth's atmosphere has been changing, largely as a result of humans burning fossil fuels, which releases large amounts of carbon dioxide and other greenhouse gases into the atmosphere. Since the industrial revolution, atmospheric concentrations of CO2 have increased by 31 percent.[2] Concentrations of other greenhouse gases have increased as well.

These atmospheric changes have intensified the greenhouse effect, allowing less of the sun's heat to escape the Earth's atmosphere. Global average temperatures increased during the 20th century by more than 0.6° C (1° F), with the rate of change for the period since 1976 roughly three times that for the past 100 years as a whole.[3] According to the United Nations' World Meteorological Organization, 2004 was the fourth hottest year ever recorded, and the 1990s were the warmest decade since measurements began in 1861.[4] If current trends continue, temperatures could rise by an additional 1.4° C to 5.8° C from 1990 to 2100.[5]

The consequences of the increase in global temperatures will vary from place to place because the Earth's climate is extraordinarily complex. According to the United Nations' Intergovernmental Panel on Climate Change, the most authoritative source on global warming, among the changes that could occur include sea level rise of up to three feet by 2100; heat waves; drought; increasingly intense tropical storms; loss of plant and animal

[2] Intergovernmental Panel on Climate Change, *IPCC Third Assessment Report – Climate Change 2001: Summary for Policy Makers*, 2001.

[3] Intergovernmental Panel on Climate Change, *IPCC Third Assessment Report – Climate Change 2001: Summary for Policy Makers*, 2001; and World Meteorological Organization, United Nations, *WMO Statement on the Status of the Global Climate in 2004: Global Temperature in 2004 Fourth Warmest* (press release), 15 December 2004, downloaded from www.wmo.ch/index-en.html, 5 January 2005.

[4] World Meteorological Organization, United Nations, *WMO Statement on the Status of the Global Climate in 2004: Global Temperature in 2004 Fourth Warmest* (press release), 15 December 2004, downloaded from www.wmo.ch/index-en.html, 5 January 2005.

[5] Intergovernmental Panel on Climate Change, *IPCC Third Assessment Report – Climate Change 2001: Summary for Policy Makers*, 2001.

species; decreased crop yields; decreased water availability; and the spread of infectious diseases.[6]

The first signs of global warming are already evident in the U.S. and worldwide. For instance, in Montana's Glacier National Park, the largest glaciers are only about one-third the size they were in 1850, and many small mountain glaciers have disappeared completely. The area of the park covered by glaciers declined by 73 percent from 1850 to 1993, and scientists estimate that the park's glaciers will disappear entirely by 2030. Meanwhile, average summer temperatures in the park have increased by about 1.8° F since 1900.[7]

Along the Atlantic coast, nine hurricanes struck the U.S. in 2004, causing extensive damage estimated at more than $43 billion.[8] According to the National Oceanic and Atmospheric Administration, the intensity of hurricanes increases as levels of atmospheric carbon dioxide increase.[9] Across the Atlantic, a landmark study recently found that human influences on the climate system more than doubled the risk of a heat wave like the one that killed 22,000 to 35,000 Europeans in 2003.[10]

Rapid climate changes in the Arctic "provide an early indication of the environmental and societal significance of global warming," according a major 2004 international report commissioned by the U.S. and seven other nations with Arctic territory.[11] The already extensive melting of glaciers and sea ice, thawing of permafrost, and shifts in ocean and atmospheric conditions will have profound effects on native communities, wildlife, and local economies. For instance, the average extent of sea-ice cover in the summer has declined by 15 to 20 percent in the last 30 years. Among other impacts, the reduction in sea ice "will drastically shrink marine habitat for polar bears, ice-inhabiting seals, and some seabirds, pushing some species to extinction."[12] The report concludes that some continued warming is inevitable given the buildup of carbon dioxide but says that the "speed and amount" of warming can be minimized by substantially reducing future emissions.[13]

Instead of applying the country's technological know-how to address the challenges of global warming, Congress has chosen to ignore the threat, calling for more research on a problem

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[6] Intergovernmental Panel on Climate Change, *IPCC Third Assessment Report – Climate Change 2001: Summary for Policy Makers*, 2001.

[7] EPA, *Global Warming – Impacts, Western Mountains* (fact sheet), downloaded from http://yosemite.epa.gov/oar/globalwarming.nsf/content/ImpactsMountainsWesternMountains.html#changingeco, 5 January 2005.

[8] World Meteorological Organization, United Nations, *WMO Statement on the Status of the Global Climate in 2004: Global Temperature in 2004 Fourth Warmest* (press release), 15 December 2004, downloaded from www.wmo.ch/index-en.html, 5 January 2005.

[9] Thomas R. Knutson & Robert E. Tuleya, "Impact of CO2-Induced Warming on Simulated Hurricane Intensity and Precipitation: Sensitivity to the Choice of Climate Model and Convective Parameterization," *Journal of Climate*, 17 (18), 3477-3495, 15 September 2004.

[10] Peter A. Stott, D. A. Stone, & M. R. Allen, "Human Contribution to the European Heatwave of 2003," *Nature*, 432, 2 December 2004; and Christoph Schar and Gerd Jendritzky, "Hot News from Summer 2003," *Nature*, 432, 2 December 2004.

[11] The Arctic Council, *Impacts of a Warming Arctic: Arctic Climate Impact Assessment*, 2004, 8.

[12] The Arctic Council, *Impacts of a Warming Arctic: Arctic Climate Impact Assessment*, 2004, 10.

[13] The Arctic Council, *Impacts of a Warming Arctic: Arctic Climate Impact Assessment*, 2004, 9.

that is already clearly defined and relying entirely on voluntary industry initiatives to merely reduce the rate of increase in global warming emissions. Moreover, Congress is pushing an energy policy that would do nothing to cap emissions of global warming pollution and would in fact increase our dependence on the fossil fuels responsible for the problem. We urge Congress to include a mandatory cap on carbon emissions similar to the Gilchrest-Olver proposal introduced in the House.

To make America more secure and move us toward energy independence, Congress must include these three critical provisions in any comprehensive energy legislation. These provisions are certainly not an exhaustive list; for example, we should also increase energy efficiency standards and incentives for appliances, homes and buildings, and create mandatory reliability standards for the electricity grid. Reducing America's dependence on oil, substantially increasing our production of clean renewable energy, and addressing the threat of global warming should be the necessary pillars upon which any energy bill is built.

The energy bill currently before this Committee and which Congress rejected last year would include none of these positive steps forward. In fact, the energy bill includes several harmful provisions that will weaken landmark environmental laws such as the Clean Air Act and the Safe Drinking Water Act, force states, counties and municipalities to shoulder the expensive clean-up costs surrounding MTBE contamination of drinking water, and provide billions of dollars in subsidies for the coal, nuclear, oil and gas industries.

Our organization has expressed our concerns on these issues at length in other places[14]; I will focus the remainder of my testimony on the nuclear provisions in the energy bill.

Nuclear Power

Nuclear power is not safe, not reliable, not economical, and not necessary. All aspects of the nuclear fuel cycle pose a risk to humans and the environment. Nuclear power generates long-lived radioactive wastes for which there is no safe solution. Nuclear power should be phased out as soon as possible and should not be encouraged as a future energy source.

Nuclear Power is Not Safe or Clean

In light of growing public concern about air pollution and global warming, the nuclear power industry has undertaken a slick advertising campaign to market itself as a safe and clean energy source. Nuclear power is in fact one of the most dangerous and polluting energy sources. Nuclear waste is one of the most dangerous substances created by humans; unshielded, nuclear waste delivers a lethal dose of radiation within seconds. This waste remains dangerous for at least a quarter of a million years (based on the decay of Pu-239). According to the Department of Energy, 95% of the radioactive waste (by radioactivity) in this country has been generated by commercial nuclear reactors. With 103 reactors, the U.S. produces nearly twice as much nuclear waste as any other country—creating the largest nuclear waste disposal problem in the world. No country in the world has a permanent solution to this problem.

The current proposal to develop Yucca Mountain as a repository remains marred in serious legal problems. For example a recent federal district court ruled that the Environmental Protection

[14] http://newenergyfuture.com/newenergy.asp?id2=11128

Agency did not adhere to the National Academy of Science's guidelines that the site be safe throughout the full period of risk. We urge Congress to ensure that scientific integrity is maintained for this project and that the National Academy of Science's guideline is not ignored.

In addition to the public health and environmental concerns accompanying the development of Yucca Mountain, the site will not be able to contain the full amount of nuclear waste generated. In fact, by 2011 the nuclear reactors in the U.S. are projected to have produced 63,000 MT of nuclear waste—the projected capacity of Yucca Mountain. With existing plants already licensed to continue operating—and producing waste—beyond 2011, it is unclear how the federal government will dispose of the excess waste. The federal government should cease building any more nuclear power plants which will only generate severe disposal problems for future generations. In light of the extensive array of energy alternatives available, it is completely unacceptable that the federal government would support generating thousands of tons of deadly radioactive waste to power our homes and turn on our computers.

Nuclear power plants threaten nearby communities

Nuclear power plants are very complex and contain enormous amounts of potential energy in the fuel at the core of the reactor. The most tragic example of the dangers posed by this technology is the 1986 accident at the Chernobyl reactor in the Ukraine. The explosion and core meltdown at Chernobyl released radiation that generated a plume encompassing the entire Northern Hemisphere [15]. Here in the U.S., in addition to the partial core meltdown at Three Mile Island in 1979, which forced the evacuation of nearly one hundred fifty thousand people, there have been four other nuclear accidents in the U.S. involving at least partial core meltdown.[16]

The potential consequences of a serious accident are staggering. A 1982 study by the Sandia National Laboratories found that a serious accident at a U.S. nuclear reactor could cause hundreds to thousands of deaths in the near term.[17]

We are concerned that utility deregulation and new ownership of reactors may increase risks of accidents because of increased pressure to run the plants closer to the margin. This risk is heightened by the fact that the 103 operating reactors around the country are deteriorating with age more quickly than expected. Even Vice President Cheney acknowledged the aging problem on the television show "Hardball" (March 21, 2001): "[T]oday nuclear power produces 20 percent of our electricity, but that's going to go down over time because some of these plants are wearing out." Despite industry's claims that nuclear power is "safe," at least ten existing reactors have experiencing aging-related shutdowns since January 2000.[18] The events at the Davis-Besse reactor in Ohio highlight the seriousness of the problem regarding the safety of nuclear reactors.

In November of 2001, the Nuclear Regulatory Commission (NRC) allowed FirstEnergy, the owner of the Davis-Besse plant in Ohio to ignore warning signs, then delay a shutdown for three

[15] OECD Nuclear Energy Agency report *"Chernobyl Ten Years On, Radiological and Health Impact"*, November 1995.
[16] Public Citizen website http://www.citizen.org/Press/pr-cmep84.htm
[17] Union of Concerned Scientists, Nuclear Plant Safety: Will the Luck Run Out? December 15, 1998
[18] Union of Concerned Scientists, "Aging Nuclear Plants and License Renewal," Issue Brief, May 22, 2001

months. Inspectors found a six-inch hole in the reactor cover that had only millimeters left until it breached the cover. According to interviews with NRC personnel, the agency backed down from issuing a safety-related shutdown order after FirstEnergy argued vigorously against a shutdown at that time because they didn't want bad publicity nor a drop in their financial ratings. At least one NRC employee felt that the company withheld important information about evidence of serious corrosion.[19] The NRC's decision to let the plant operate and rake in profits a few months longer even with evidence of serious problems jeopardized the health and safety of the surrounding communities. First Energy is currently under a grand jury investigation related to the events at Davis-Besse. Events such as these underscore the severe security risk posed by nuclear power plants.

Congress should oppose programs, which increase the threat of nuclear proliferation
Plutonium, an element that can only be produced in nuclear reactors, is the material of choice for nuclear weapons. All reactors produce it, but it must be separated from highly radioactive irradiated fuel before it can be used in weapons. This separation process is known as "reprocessing." For at least two decades, the United States has had a policy against reprocessing waste from commercial nuclear reactors and not allowing plutonium to be used as fuel in nuclear reactors to prevent the proliferation of weapons-usable material.

The Advanced Fuel Recycling Program specifically reverses the decades-long U.S. policy against reprocessing commercial nuclear waste. It advocates reprocessing commercial nuclear fuel and using several types of reactors to allegedly reduce the volume and toxicity of the waste.

A January 2003 report, entitled "Report to Congress on Advanced Fuel Cycle Initiative: The Future Path for Advanced Spent Fuel Treatment and Transmutation Research," admits that this costly program will not obviate the need for a geologic repository. Further it contradicts itself with regard to nuclear non-proliferation. First, it claims that the program can "destroy" plutonium thus reducing the risks of this material falling into the wrong hands. [20] On the same page, however, it touts the potential for a commercial nuclear fuel cycle based on the plutonium separated from existing irradiated fuel – a program that would dramatically increase the risk of weapons materials falling into the wrong hands by putting separated plutonium into commercial nuclear reactors. We urge Congress to end funding for the advanced fuel cycle initiative.

Nuclear Power is Not Economical
Nuclear power would not exist in this country today if it were not for enormous subsidies paid for by ratepayers and taxpayers. Originally touted as being "too cheap to meter," nuclear power has proven to be too expensive to afford. The nuclear industry has received the vast majority of energy research and development funding, a special taxpayer-backed insurance policy known as the Price Anderson Act, unjustified electric rates from state regulators, enormous and unwarranted bailouts in state deregulation plans, and ultimately a taxpayer-funded nuclear waste dump. The industry has not been able to build a new plant in thirty years because private investors believe that nuclear power is a risky and uneconomical investment. Even after fifty

[19] Nuclear Regulatory Commission Inspector General Interviews on Davis-Besse http://www.ucsusa.org/clean_energy/nuclear_safety/page.cfm?pageID=1123
[20] Report to Congress on Advanced Fuel Cycle Initiative: The Future Path for Advanced Spent Fuel Treatment and Transmutation Research, DOE, January 2003, p. II-6.

years of constant federal support, the nuclear industry is incapable of building new plants on its own, and since private investors have shown disinterest, the industry is now asking taxpayers for new handouts.

DOE commissioned a report by Scully Capital called "Business Case for New Nuclear Power Plants,"[21] which concludes that existing taxpayer backed insurance (known as the Price Anderson Act), federal research and development funds and ultimately federally-funded nuclear waste program are not enough to make these new reactors cost-competitive. Instead it recommends a mind-boggling suite of new subsidies including: a federal energy credit program, low interest loans, power purchase agreements (at up to 50% more than market rates), emissions credits and additional insurance. This report estimates that the federal government would have to spend at least $1.5 to 2.75 billion in subsidies to bring down the capital costs of five new nuclear plants. This estimate does not include any additional subsidies for nuclear waste disposal, siting and permitting the new plants. The energy bill extends existing subsidies and creates new ones for the nuclear industry. I outline below of few of the most unjustified and costly subsidies below:

Congress should remove the $6 billion tax giveaway

One of the primary obstacles to building new nuclear power plants in the U.S. is the large upfront capital cost of plants. With investors uninterested in bearing the financial risk, the federal energy bill uses taxpayer dollars to assist the industry. Specifically, the energy bill provides the nuclear industry with a production tax credit of 1.8 cents per kilowatt-hour. Under the proposal, a 1000 megawatt (MW) nuclear power plant could claim an annual credit of up to $125 million over an eight year period for a total of $1 billion in federal support. The proposal allows for us to six 1000 MW plants to claim the credit, costing taxpayers as much as $6 billion. The Committee should strip this costly giveaway from the energy bill, particularly within the current budget climate.

Congress should remove the $1 billion giveaway for the Idaho reactor

In addition to the $6 billion tax credit, Subtitle C-Advanced Reactor Hydrogen Cogeneration Project—provides $1.1 billion to build a nuclear reactor at the Idaho National Engineering and Environmental Laboratory that would attempt to co-general hydrogen. Specifically, the provision provides $500 million for construction and $635 million plus such sums as are necessary to research, develop and design the new plant. The federal government can actually fund two teams for one year to develop a proposal for building the reactor. Furthermore, the provision does not even require that the plant achieve its intended goal of producing electricity from nuclear power and hydrogen. "The overall project, *which may involve demonstration of selected project objectives in a partner nation*, must demonstrate both electricity and hydrogen production." It makes little sense from a policy perspective to tie the promise of hydrogen as a clean energy source to the most dangerous and historically most expensive energy source. We urge Congress to remove this over-priced boondoggle.

Congress should not extend Price Anderson Act.

We oppose extension of the Price Anderson Act, which is an unwarranted taxpayer subsidy to the nuclear industry. This law, passed in 1957 and amended several times since, provides

[21] http://www.nuclear.gov/home/bc/businesscase.html

taxpayer-funded insurance for the nuclear industry in the event of an accident. In case of an accident at a nuclear power plant, the industry gets a guarantee of limited liability while the public gets no guarantee of full compensation. Instead of having to purchase insurance on the private market—as other countries have required the industry to do—the nuclear industry in the U.S. is provided a cap on their liability. This confers a substantial annual subsidy to the nuclear industry in terms of foregone insurance premiums, as well as reduced payments in the case of a serious accident. The Price-Anderson Act also provides blanket indemnity to Department of Energy contractors, even in cases of intentional misconduct and gross negligence. Price Anderson was passed as a temporary measure that was supposed to be phased out once the industry established sufficient confidence in the safety of its product. However, 50 years later the industry is still requesting that Congress extend Price Anderson. Existing plants are already covered under the law; yet the industry is requesting an extension to cover new plants. If the industry is confident in the safety of nuclear power they should be willing to fully insure their product instead of asking for federal assistance.

Congress should oppose nuclear research and development funding.
According to the Congressional Research Service, the federal government provided the nuclear industry with more than $70 billion in research and development subsidies or nearly 60 percent of all federal energy research and development funding between 1948-98. We are extremely disappointed that the subcommittee draft legislation includes authorization of nearly $2 billion in commercial nuclear research and development subsidies. The Department of Energy's own studies show that new reactors developed through taxpayer-funded programs such as Generation IV and Nuclear Power 2010 are not cost-competitive.[22] The nuclear power industry is not a new or budding industry; after more than fifty years of research and development support, it is time to get the industry off of the federal dole.

Nuclear Power is Not Necessary
Nuclear power is not safe, not economic, and not necessary. Congress should do everything it can to protect the health and safety of the public as well as taxpayers. Nuclear power should be phased out as quickly as possible. By setting strong energy efficiency standards for homes, buildings, and appliances, and by increasing investments in energy efficiency, we can reduce our electricity use in the U.S. by 28 percent by 2020, according to conservative estimates. Instead of increasing federal support for building additional nuclear power plants, we should pursue an aggressive and affordable strategy to increase America's production of renewable energy and invest in energy efficiency.

Conclusion
America needs an energy policy that will make our nation more secure and less dependent on foreign energy, reduce the energy costs on all consumers—residences, commercial, industrial—and minimize the harmful public health and environmental impacts of energy production and consumption. The energy bill before Congress would fail on all these counts. It is time for Congress to abandon the failed energy policies of the past century and redirect America's energy toward a safe, secure and affordable future.

[22] http://www.nuclear.gov/nerac/ntdroadmapvolume1.pdf